

Whelk Management Group (WMG) Meeting

20th February 2023

Remote meeting via Microsoft Teams

Attendees

Name:	Organisation:
Andy Lawler	Cefas
Aoife Martin	Seafish
Charlie Brock	Brighton and Newhaven Fish Sales Ltd
Charlotte Colvin	Bangor University
Chloe North	Western Fish Producers Organisation
Claire Pescod	Macduff Shellfish Ltd
Ella Brock	Seafish
Gary Hodgson	Hodgson Fish
Jim Evans	Welsh Fishermen's Association
Joanna Messini	Defra
Jonathan Parr	MMO
Leo Clarke	Bangor University
Lewis Tattersall	Seafish
Liam Hawkes	Defra
Louise Price	MMO
Michel Kaiser	Heriot Watt University
Moritz Eichert	Heriot Watt University
Sarah Bedingham	MMO
Tim Smith	AIFCA
Tony Miles	MMO
William Brock	Brighton and Newhaven Fish Sales Ltd

Apologies

Gwladys Lambert	Cefas
Juliette Hatchman	Southwest Fish Producers Organisation
Katrina Ryan	Mindfully Wired Communications
Natalie Hold	Bangor University
Mark Tilling	Welsh Government

Review minutes and actions from the previous WMG meeting, November 2022 (Lewis Tattersall, Seafish)

- 1 Researchers at Heriot Watt University have circulated details on how fishers can get involved in the ongoing whelk data improvement FISP project, and a number of WMG members are already signed up to collaborate on this research (Action 1.10).
- 2 As part of the development process for the whelk fisheries management plan (FMP) for English waters, Seafish has produced a draft whelk Evidence Statement. This document, which summarises existing understanding and information on English whelk fisheries, was submitted to Defra at the end of January 2023 as an annex of the whelk FMP. The evidence statement is therefore currently going

through the Defra Gateway review process. Once this process is complete, the Evidence Statement will be shared with the group during public consultation (Action 2.10).

- 3 Seafish circulated the FMP engagement slide pack to all WMG members following the November WMG, members support in promotion of stakeholder engagement events held at the end of 2022 was greatly appreciated (Action 3.10).
- 4 Seafish has scheduled a WMG Science Sub-Group workshop in March 2023 to outline data requirements for whelk fishery management, and how these data requirements could be met (Actions 4.10 and 5.10).
- 5 Defra confirmed that they are able to share a note on the legislative context around permits versus entitlements (including information provided by the MMO), see information below in **paragraph 24**. There is a need to obtain clarity on this issue and address the confusion amongst group members. Defra is conscious not to pre-empt the outcomes of public consultation, and suggest that the group should focus on what a measure to restrict access to whelk fisheries would aim to achieve, rather than the name of the mechanism (Action 6.10).
- 6 Seafish is currently developing and scoping out two early intervention management proposals. These will be shared during the FMP update later on in the agenda, with a view to distribute more details over the coming months (Action 7.10).

Open session for members to raise issues of interest

- 7 Seafish notified the group regarding reports of whelk mortality issues in the Kent and Essex IFCA district. This is thought to be a localised issue, with declining catch rates linked to increased whelk mortality (additionally suggested by anecdotal reports of increased catches of hermit crabs). Any available resources relating to this issue will be circulated with the meeting minutes.
- 8 A collaborative investigation into K&EIFCA district whelk mortalities is being carried out across Cefas, the IFCA's, and Bangor University. Cefas has conducted some preliminary testing of frozen whelk samples:
 - a. Testing has ruled out the effect of toxins, but no conclusive results yet as testing for pathogens still needs to be explored.
 - b. Favoured theory at the moment is that this is an environmental issue following the warm water temperatures experienced during summer 2022. It is hoped that catch rates will increase now that temperatures have dropped to within a more tolerable range. It has however been noted that similar extended warm water events were experienced in 2018 with no such mortalities or reduced catch rates observed.

Proposed early management interventions (Aoife Martin, Seafish)

- 9 Seafish introduced the proposed early management interventions, which have been developed based on feedback gathered from both the WMG and whelk FMP stakeholder engagement events. Work is ongoing on further developed proposed early management interventions; it is hoped that these interventions can be consulted on alongside the draft whelk FMP for English waters in May 2023 It was highlighted that the purpose of the WMG is to bring together industry, researchers, and fishery regulators, and it will be useful to gain all three perspectives.

Comments on **Proposal 1: Restricting access to whelk fisheries by means of a permit / entitlement**

- 10 No disagreement regarding the need to prioritise ring-fencing whelk fishing effort, especially given that over the past ~12 months markets and catch rates have begun to recover from the impacts of the

Covid-19 pandemic. It was noted that preventing further increases in fishing effort from new vessels entering the fishery would not necessarily prevent further increases in fishing effort from those already within the fishery, as such this is seen as a preliminary step towards better management of whelk fisheries.

- 11 Introduction of a permit / entitlement will be important for pre-empting and preventing increased effort caused by displacement into the open access whelk fishery, e.g. following increased management on other NQS shellfish fisheries that may arise as a result of other FMPs or through the Trade & Cooperation Agreement.
- 12 Once the FMP has been finalised following public consultation, impact analyses of proposed early management interventions will be conducted by Defra (i.e. evaluating social impacts, economic impacts, and impacts on sustainability).
- 13 There were continued discussions around the distinction between a permit and an entitlement. It was suggested that a permit might be the most effective tool to contain effort since this can potentially be delivered by altering licence conditions, however the MMO raised some concerns around the large number of licence conditions already in existence. This was met with general agreement that licence conditions are a good way to control the fleet, however there were questions around the suggestion of using a *permit* to achieve this.
- 14 Defra commented that the terms permit and entitlement are used interchangeably, for example the “scallop entitlement” is effectively a permitting scheme. Industry attendees requested that the FMP and management proposal use wording which is consistent with the wording used in fishing licences and transfer forms – for ease of understanding.
- 15 Questions raised around the regulatory mechanism behind the introduction of a permit / entitlement, e.g. whether this will be achieved through an SI or IFCA byelaws, and how this translates in terms of enforceability. There is a need to understand which (permit or entitlement) is the fastest and easiest mechanism to implement.
- 16 Consensus there that whichever mechanism is introduced; it must have the legal force to achieve fishery management goals of limiting effort on whelk stocks by limiting access to the fishery. Industry members suggested permits may not be effective in limiting the fleet given that any vessel may acquire a permit so long as they meet the permit conditions (based on experience in IFCA permitting schemes). Other group members suggested that theoretically both permits and entitlements could be used to limit fishing effort – e.g. by capping the number of permits or entitlements available.
- 17 Discussions around key characteristics that a permit / entitlement should incorporate in order to deliver fisheries management benefits in the whelk context:
 - a. National scale implementation, to limit expanding fishing effort in the first instance from vessels moving into the fishery.
 - b. Track record / reference period (retrospective to the launch of the consultation, to avoid a ‘race to fish’), this would have benefits in terms of managing latent capacity.
 - c. Flexibility to alter and make variations in the future, for example to:
 - i. Respond to future changes / issues
 - ii. Account for nuances in the fishery at a regional scale
 - iii. Enable flexibility for nomadic vessels
 - iv. Avoid unintended consequences.
 - d. Clear definition of the fishery in scope
 - e. Enforceability across all UK and non-UK vessels, e.g. under external waters licences.
 - f. Consideration of the EU Trade & Cooperation Agreement (TCA).
 - g. Consideration of data collection requirements, e.g. MMO Catch app.

- 18 Suggestion that another alternative could be to implement a “*limited license entry fishery*” whereby the number of licenses restricts the number of vessels that can participate. This would require clear definition of the ‘fishery’, for example the geographic component. The advantage of using licenses is that multiple conditions can be added.
- 19 Discussions around *how* Defra should consult on the mechanism for limiting whelk fishing effort. The group discussed that public consultation will be an opportunity to test the proposal to restrict access to the whelk fishery, as well as the mechanism for limiting access (i.e. permit / entitlement). It will be necessary to consider wider impacts on the fleet.
- 20 Discussions around lessons learned from restrictive shellfish licencing for crab and lobster fisheries introduced in 2006. Issues arose as the introduction of this scheme coincided with the introduction of the MMO’s ‘buyers and sellers’ initiative, resulting in a period of time when fishers were asked to provide a lot of data for a number of different reasons, this was seen to impact the quality of the data provided. This scheme was also not designed to limit effort immediately, the idea was that it could be used to limit effort in the future if required. Industry attendees noted their disappointment that shellfish entitlements were not used to limit fleet capacity at this time.
- 21 Suggestions that a pot limit would be necessary in conjunction with a permit / entitlement to prevent expansion of fishing effort through increased pot numbers. Group members discussed that:
 - a. Currently, there is no restriction of the number of pots fishers can keep in the sea outside of IFCA districts.
 - b. Scale of the issue is uncertain as it is thought that whelk catch rate drops once the bait is depleted.
 - c. Issues may arise / be exacerbated if a pot was developed to retain the catch once the bait is depleted (i.e. catching efficiency increases)
 - d. Pot limits need not be hugely limiting in the first instance, the ambition could be to maintain the status quo.
 - e. National data on number of pots is typically unreliable, IFCA’s hold better quality data for their districts due to permit schemes which require submission of catch return forms.
 - f. There is a need to understand how many pots are currently in use, so as to avoid pot limits becoming a target number rather than a limiting factor (lessons learned from IFCA byelaws).
- 22 There is an opportunity to learn from implementation of the whelk permit scheme in Wales, where similar questions were asked during consultation. It was noted that a number of the concerns originally raised during consultation have not been realised despite increases in whelk prices. This scheme did not apply a track record period, opting for an annual and monthly landings cap that can be varied throughout the year depending on uptake.
- 23 Defra noted that to implement a permit / entitlement would require an SI, which could take over 12 months to deliver. The group could work within these timescales to develop permit / entitlement / licence conditions.

Response from Defra on permit vs. entitlement, received 3rd March 2023

- 24 Following the WMG meeting (on 3rd March 2023), Defra provided the following additional information clarify ongoing discussions on the definition of a permit or entitlement to inform discussions about the appropriateness of each tool in the whelk fishery context:

For the purposes of restricting access to a fishery, there is no legal definition for what is allowed under an entitlement or a permit. There is a misconception that a permit scheme allows open access and an entitlement is restrictive. In practice, both terms can be used interchangeably.

This means we can design a scheme to be as restrictive or as open as we want e.g. an open entitlement or a restrictive permit. We also do not consider that either has a monetary value attached. What is of vital

importance is to determine the detail of how and for what purpose we want a fishery to be restricted, rather than the name of the scheme.

25 The above information was provided by Defra following engagement with the MMO legal team. The naming of such a scheme is secondary to the design of a scheme, its intentions, and the restrictions imposed on the fishery to protect stocks. Once further details of the proposed scheme are supplied to Defra it will be possible to seek further advice from Defra and MMO legal teams on application and enforcement.

Comments on Proposal 2: Spatial closures to protect whelks during spawning periods:

26 Group members noted that if spatial closures are to be developed, it will be necessary to assess the other options available to fishers during this time – as some will be highly reliant on the whelk fishery, and there will therefore be social and economic implications of any proposed closures.

27 Questions as to why spatial closures would be a good tool for management of the whelk fishery, and what are the expected benefits. It was highlighted that the aim of closures would be to ensure that whelks are allowed to spawn before they are harvested, thus protecting their ability to maintain healthy population sizes. Questions were raised around the proposal of “spatial” closures, given that whelks typically lay eggs wherever there is suitable substrate available, as opposed to having defined spawning grounds. Effectiveness of closures was also questioned given that there is a high rate of natural mortality before juvenile whelks recruit into the fishery.

28 The group discussed appropriate timings for seasonal closures, and it was noted that Cefas have looked into this since the WMG last met. In English waters, most whelks spawn over winter, which typically results in reduced catch rates during this time (however, industry members suggested that spawning may occur in November or May / June depending on water temperature). This raised questions around how effective a seasonal closure would be at reducing effort on the stock. Industry noted that whilst a lot of vessels consider it “good practice” to not target whelks during their spawning period (when yield ratio also declines), not all vessels stop whelking during this time.

29 Industry attendees noted that landings data alone will likely not produce an accurate depiction of whelk spawning periods, as vessels may change to exploit more lucrative fisheries in certain months. It may be useful to break down national figures to reveal trends in regional fisheries.

30 It was noted that some IFCA collect information on seasonality of whelk stocks and / or fisheries, for example length-weight analyses. Whelk processors will also possess data on yield ratios throughout the year. VMS data could be investigated to assess temporal and spatial trends in the whelk fishery, in relation to the seasonality of whelk populations (e.g. spawning periods). It would be useful to collate this information to develop a better understanding of the seasonality of whelk populations at a finer scale more applicable to management. It was however noted that in some areas, industry have observed that yields do not vary throughout the year.

31 The group offered a number of suggestions regarding spatial closures:

- a. A reduction in effort post-spawning might reduce sex-overfishing on females, as this would allow females time to recover from a depletion in energy during spawning.
- b. There is a need to account for the bycatch of whelks in other fisheries, for example whelks might be landed by beam trawlers.
- c. A pilot study / research project could be run to assess effectiveness of this measure in terms of protecting whelk populations.

Review of FMP development process and outputs (Lewis Tattersall, Seafish)

- 32 Seafish presented an overview of the whelk FMP, which will be circulated with the meeting minutes:
- a. FMP links to the Fisheries Act 2020 and delivery through collaboration with the WMG, WMG FMP Working Group, and the WMG Science Sub-Group.
 - b. FMP contents – including Shared Shellfish objectives, Whelk-specific objectives, and the Evidence and Research Plan, as well as Annexes 1-3 (Evidence Statement, Evidence and Research Plan, Stakeholder Engagement report).
 - c. Stakeholder engagement events, which were held in-person (at 5 locations around England) and online to raise awareness about FMPs, gather feedback on draft content, and discuss management options. Feedback was also gathered via email, phone, and letters:
 - i. Support for improved/ collaborative management, improved data collection, industry input to marine spatial planning processes, harmonisation of some measures (e.g. MLS increases), distinction between different fleet metiers, and promoting trade.
 - ii. Mixed views regarding latent capacity and climate change.
 - iii. Concerns that “we have been here before” and how FMPs will interact with existing management (e.g. IFCA byelaws)
 - d. Shared shellfish objectives (summarised):
 - Objective 1: Formalise the SIAG, and sub-groups, as a focal point of industry engagement on shellfish fisheries management
 - Objective 2: Assess and address likely impact of latent capacity
 - Objective 3: Support industry engagement on NQS management under the TCA
 - Objective 4: Support the shellfish industry in matters regarding marine spatial planning
 - Objective 5: Understand the impact of non-fishing activities on shellfish stocks
 - Objective 6: Progress initiatives to promote consumption of shellfish
 - Objective 7: Facilitate trade opportunities
 - Objective 8: Develop guidance and advice on shellfish welfare issues
 - Objective 9: Support the shellfish industry to build and maintain a positive reputation
 - Objective 10: Support the shellfish industry to adapt to, and mitigate climate change.
 - e. Whelk specific objectives (summarised):
 - Objective 1: Develop and pilot an improved data collection programme
 - Objective 2: Define key whelk stock boundaries
 - Objective 3: Assess catch per unit effort (CPUE) in the whelk fishery
 - Objective 4: Explore options for assessing stock(s) or exploitation status
 - Objective 5: Assess the impact of fishing activity on the wider marine environment
 - Objective 6: Explore the need for management of interactions between fisheries
 - Objective 7: Design management to align fishing effort with actual / likely stock status

Update on process and timeline for next steps (Liam Hawkes, Defra)

- 33 Defra’s Gateway panel will convene on 28th Feb 2023 to discuss drafts of frontrunner FMPs and potential amendments with delivery leads (Seafish for the whelk FMP). Assurance will be provided to senior civil servants and ministers that the FMP drafts can be published, in line with Defra’s legal obligations. It was highlighted that inclusivity across partners and delivery leads will be key to this process.
- 34 FMP documents and annexes will go out to public consultation around the beginning of May 2023 to gather wider views from stakeholders. There will be additional stakeholder engagement prior to this consultation in the form of two webinars on the 1st and 2nd March, which will be open invite with the same session repeated on both days to provide information on draft FMPs and initial management proposals. Links for these webinars were shared with the WMG via email and in the meeting chat.

- 35 Questions were raised around when draft FMP documents can be shared with the WMG. Whilst the draft FMPs will require legal checking, annexes should be easier to share at this stage. Defra is still working out what can and cannot be shared at present.
- 36 An update was also provided on Tranche 2 FMPs, which are currently undergoing stakeholder engagement which will be reviewed throughout May before public consultation in September.

Impacts of Climate Change on the common Whelk (Charlotte Colvin, Bangor University)

- 37 The aims of this FISP funded project are to understand the environmental and economic impacts of climate change on whelk populations (growth, distribution, mortality) and develop 'temperature-risk maps' for whelk fisheries. This will inform proactive management which is responsive to climate change related challenges.
- 38 This project is currently in Phase 1, gathering samples for shell isotope analysis, and tank based experiments – to develop growth curves under various temperatures to answer the question of whether whelks in warmer waters grow quicker, and how does this vary throughout their life cycle. Climate change scenarios will be modelled using whelks sampled from cold (Shetland/Orkney), mid (Wales) and warmer (Jersey) waters.
- 39 The group discussed whether investigation of CO₂ sequestration and heavy metals could be incorporated into this project. It was highlighted that this has been considered by the project team and would require additional funding and access to specialised spectrometers.

Seabed Ecosystem Project (Leo Clark, Bangor University)

- 40 Habitats regulation assessment (HRA) informed spatial closures on Welsh horse mussel (*Modiolus* spp.) reefs were recently rescinded after scrutiny of evidence, this 18 month FISP funded project has been developed to fill evidence gaps to avoid unnecessary losses of fishing opportunities in the future, and inform HRAs and FMPs. This will be achieved by quantifying the footprint of whelk pot fishing using cameras and acoustic techniques, and assessing immediate and chronic impacts on reefs using dive and camera surveys due to start in summer 2023. This is a collaboration between Bangor University, Natural Resource Wales (NRW), and Welsh Fishermen's Association (WFA).
- 41 The project is in an early phase, looking at procuring acoustic equipment and evaluating methodologies (e.g. how to distinguish pots in situ versus being hauled). Industry have shared fishing activity data with researchers, which will be compared to NRW's camera data.
- 42 The group discussed the importance of distinguishing between impacts on rocky versus biogenic reefs, with references made to work in Lyme Bay. It was highlighted that for biogenic reef types – i.e. *Modiolus* or *Sabellaria* – there is little data on whelk potting impacts so fishers are subject to precautionary measures. WFA noted that this project is connected to a wider piece of work looking at a variety of sensitive species under the Round 3 FISP project [Filling the gap in crustacean evidence for English and Welsh FMPs](#). Members also highlighted that Orkney based researchers are currently collating all known impacts of pot fisheries on seabed habitats, and this resource should be available within the next 6 months.

Whelk data improvement project (Moritz Eichert, Heriot-Watt University)

- 43 This project aims to improve understanding of appropriate whelk management units, gear selectivity across different pot types (e.g. laydown, inkwell, lampshade) and optimal whelk handling, and viable bait alternatives (e.g. artificial chemical attractants), in order to produce best practice guidance. Addressing these key evidence gaps creates strong links to both shared shellfish and whelk specific FMP objectives.
- 44 The project will explore use of low cost fisher self-sampling and new technologies (such as RFID scannable pot tags) to improve understanding of fishing effort alongside catch returns. Researchers have designed a qualitative interview structure to evaluate fishers views on subjects such as riddling (e.g. pros and cons of manual versus rotary riddles, and the effects of rolling on discard survival rates). Interviews last approximately 1 hour and fishers have been generally keen to assist with data collection so far.
- 45 The group noted that if MLS were to increase, so would discard rates. Therefore it is important to understand discard survival rates and predator susceptibility in order to evaluate such management interventions. This requires consideration of shell damage, disorientation and exposure to air and high temperatures during hauling, sorting, storage, and discarding of whelks. These factors can be tested under lab conditions. It would be preferable to sort the catch through improved pot selectivity, rather than on-board riddling.
- 46 Suggestion from group members that this project should utilise existing networks and collaborations established through both the climate change and *Modiolus* spp. FISP projects. This will make best use of prior stakeholder engagement efforts, and facilitate inclusion of Welsh industry.

Actions

Number	Description	Responsible
1.11	Distribute resource with more information on whelk mortalities in the Kent and Essex IFCA district.	Seafish
2.11	Obtain a legal definition of permit and entitlement, which will be distributed to the WMG by 20/03/2023.	Defra, MMO, Seafish
3.11	Provide an indication of the mechanism and timeframe for implementing a permit or entitlement.	Defra, MMO, Seafish
4.11	Compile a list of IFCAs which hold information on the seasonality of whelk populations and/or fisheries - e.g. length weight analyses.	AIFCA
5.11	Distribute Seafish FMP update slides.	Seafish